

CLAIMS

1. An apparatus, comprising:
a searcher for:
detecting a plurality of cells to form a ranked list of monitored cells;
searching each cell from a first list of cells during each of a series of cycles; and
searching each cell from a subset of a second list of cells during each of the series of cycles; and
a processor for:
ranking the list of monitored cells to form a ranked list of monitored cells;
selecting the first list of cells from the ranked list of monitored cells; and
selecting the subset of the second list of cells, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during each cycle.
2. The apparatus of claim 1, wherein:
the processor further:
compares the number of cells in the list of monitored cells to a pre-determined search number; and
wherein:
the ranking, selecting the first list, and selecting the subset of the second list is performed when the number of cells in the monitored list is greater than the pre-determined search number.
3. The apparatus of claim 2, wherein the processor directs the searcher to search each cell in the list of monitored cells when the number of cells in the monitored list is less than or equal to the pre-determined search number.

4. A method of monitoring neighbor cells, comprising:
 - detecting a plurality of cells to form a list of monitored cells;
 - ranking the list of monitored cells to form a ranked list of monitored cells;
 - searching each cell from a first list of cells selected from the ranked list of monitored cells during each of a series of cycles; and
 - searching each cell from a subset selected from a second list of cells during each of the series of cycles, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during each cycle.
5. The method of claim 4, further comprising:
 - comparing the number of cells in the list of monitored cells to a pre-determined search number; and
 - wherein the ranking, searching the first list, and searching the subset of the second list is performed when the number of cells in the monitored list is greater than the pre-determined search number.
6. The method of claim 5, further comprising:
 - searching each cell in the list of monitored cells when the number of cells in the monitored list is less than or equal to the pre-determined search number.
7. The method of claim 4, wherein each subset selected from the second list is selected in round-robin fashion.
8. The method of claim 4, wherein the cells are ranked in decreasing order of measured signal strength.
9. The method of claim 4, wherein the detecting step is repeated with a minimum frequency according to one or more pre-determined refresh parameters.
10. The method of claim 9, wherein the detecting step comprises one or more search types.

11. The method of claim 10, wherein the detecting step comprises intra-frequency searching.
12. The method of claim 10, wherein the detecting step comprises inter-frequency searching.
13. The method of claim 10, wherein the detecting step comprises inter-radio access technology searching.
14. The method of claim 10, wherein the one or more refresh parameters are associated with the one or more search types.
15. The method of claim 4, wherein the plurality of cells detected comprises intra-frequency cells.
16. The method of claim 4, wherein the plurality of cells detected comprises inter-frequency cells.
17. The method of claim 4, wherein the plurality of cells detected comprises inter-radio access technology cells.
18. Processor readable media operable to perform the following steps:
 - detecting a plurality of cells to form a list of monitored cells;
 - ranking the list of monitored cells to form a ranked list of monitored cells;
 - searching each cell from a first list of cells selected from the ranked list of monitored cells during each of a series of cycles; and
 - searching each cell from a subset selected from a second list of cells during each of the series of cycles, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during each cycle.